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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,958	03/16/2001	Josef Reitter	P01.0097	7116

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EXAMINER

SMITH, RUTH S

ART UNIT PAPER NUMBER

3737

DATE MAILED: 02/06/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/809,958	Applicant(s) REITTER ET AL.	
	Examiner Ruth S Smith	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.6</u> . | 6) <input type="checkbox"/> Other: ____. |

Drawings

The drawings are objected to because reference numeral 7 in figure 1 does show a liquid medium such as water as disclosed. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: On page 9, line 12, "ti" should be "to". Appropriate correction is required.

Claim Objections

Claim 2 is objected to because of the following informalities: In claim 2, it is unclear as to what structure is defined by "apparatus components" other than the components previously set forth. In claim 2, line 3, "set" is questioned. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear as to how the acoustic transducer is transparent to x-rays when the only disclosed materials for the electrodes are aluminum and stainless steel which are both known to be radiopaque.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. The specification discloses that the acoustic transducer electrodes can be made from either aluminum or stainless steel. Such materials are well known to be radiopaque and therefore not transparent to x-rays. Therefore, the use of these electrodes as disclosed would not allow for the transducer to be transparent to x-rays.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4,8,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann et al ('152) in view of Rattner ('804) or Herrmann et al. Hartmann et al disclose an acoustic wave source comprising first and second electrodes having an electrolyte therebetween which when heated causes an acoustic wave to be formed. Hartmann et al further disclose either the use of an acoustic lens or shaping the first electrode to be concave to focus the acoustic wave to the desired location. Rattner and

Herrmann et al each disclose an acoustic wave source having a portion of the acoustic transducer transparent to x-rays to allow an x-ray device to locate the treatment area. It would have been obvious to one skilled in the art to have modified Hartmann et al such that at least a portion of the acoustic transducer is transparent to x-rays in order to allow x-ray locating of the area of interest. With respect to claim 3, in the absence of any showing of unexpected results the thickness of the electrodes could be selected without undue experimentation to achieve the desired results. Furthermore, any thickness can be set forth in the micrometer range, for example a thickness of 1 millimeter is equal to a thickness of 1000 micrometers.

Claims 5-7, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartmann et al ('152) in view of Rattner ('804) or Herrmann et al as applied to claim 1 above, and further in view of Peterson et al. It is well known in the art to construct the electrodes of a transducer from either stainless steel or aluminum. An example of such is seen in Peterson et al. It would have been obvious to one skilled in the art to have further modified Hartmann et al such that the electrodes are comprised of either stainless steel or aluminum. Such a modification merely involves the selection of a well known material based upon its suitability for intended use. Furthermore, it should be noted that it is well known in the art that such materials are inherently corrosion-resistant. With respect to claim 10, it is well known in the art to provide a fluid circulation system to circulate fluid present through the device in order to provide degasification of the fluid. The presence of gas in the fluid can adversely affect operation of the device. An example of such a circulatory system is seen in Peterson et al. It would have been obvious to one skilled in the art to have further modified Hartmann et al such that it includes a circulatory system in order to remove harmful gas bubbles from the fluid.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S Smith whose telephone number is (703) 308-3063. The examiner can normally be reached on M-F 5:30 AM- 2:00 PM.

Art Unit: 3737

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Ruhl can be reached on (703) 308-2262. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ruth S Smith
Primary Examiner
Art Unit 3737

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